S/129/62/000/011/007/007
E073/E535

AUTHOR: Kashchuk, V.A., Engineer

TITLE: Influence of cobalt on some properties of cast high-vanadium, high-speed steel

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, no.11, 1962, 53-55.

TEXT: Experimental steels were produced in a high-frequency furnace with an acidically lined crucible of 2 kg capacity. The charge used was scrap Р18 (R18) steel, ferro-alloys and a special 5% C pig-iron produced from high-speed steel. Titanium (0.22%) was added after deoxidation with 0.1% aluminium. Six heats were centrifugally cast into chill moulds. The compositions (maxima/minima) were as follows: 1.47/1.61% C, 19.35/20.54% W, 5.20/5.65% Cr, 4.83/5.25% V, 5.65/26.81% Co. All the cast material was hardened during the process of cooling in the chill mould to the following hardness values:

Co, % ...	0	5.6	12.5	16	20.4	26.8
HRC ...	53	63.5	64	60	53	47.5

Introduction of 12.5% and more of cobalt increases the range of

Card 1/2

KASHCHUK, V.A., inzh.

Effect of cobalt on certain properties of cast, high-vanadium, rapid cutting steel. Metalloved. i term. obr. met. no.11:53-55 N '62. (MIRA 15:11)

1. Tomskiy politekhnicheskiy institut.
(Tool steel)

BELOVITSKIY, G.Ye.; KASHCHUKEYEV, N.T.; MUKHUL, A.; PETRASHKU, M.G.; ROMANOVA, T.A.; TIKHOMIROV, F.A.

Mechanism of uranium fission induced by slow μ^--mesons. Zhur.eksp.i teor.fiz. 38 no.2:404-408 F '60. (MIRA 14:5)

1. Ob"yedinennyy institut yadernykh issledovaniy i Fizicheskiy institut im. P.N.Lebedeva Akademii nauk SSSR.
(Uranium--Isotopes) (Mesons) (Nuclear fission)

L 25844-66
ACC NR: AR5018683 SOURCE CODE: UR/0196/65/000/007/B010/B010

37
B

AUTHOR: Kashechkin, N. I.; Moreyev, A.K.; Perel'mutor, N. M.; Uvarov, N. V.; Shvionov, I. V.

ORG: none

TITLE: Portable power station "Druzhba" for lighting purposes

SOURCE: Ref. zh. Elektrotekhnika i energetika, Abs. 7B55

REF– SOURCE: Lesoekspluat. i lesn. kh-vo. Ref. inform., no. 5, 1965, 8-9

TOPIC TAGS: power generating station, ~~[illegible]~~, lighting equipment, electric motor

TRANSLATION: This power station is to supply light and heat up to 1.5 kw and can be used on construction sites, wood clearings, timber conveying points, etc. For primary motive power, a one-cylinder, two-cycle motor is used (from a gasoline-motor saw). Through the reducer, the motor is connected with a generator of 1.7 kw, 220 v and 200 cps (shortcircuited and asynchronous). For excitation, a battery of condensers of 24 microfarades is switched in. A diagram of the portable power station and directives for its operation are given. B. Shifrinson.

SUB CODE: 09/ SUBM DATE: none

Card 1/1

UDC: 621.311.23:634.0

KASHECHKIN, N.N.; PEREL'MUTER, N.M.; VINOGOROV, G.K.; YERMOLAYEV, V.M.;
ITINA, L.S.; MIKHAYLOVSKIY, Yu.V.; BOLDOV, M.Ye.; TSETLIN, A.M.;
ZHURAVLEV, B.A., red.izd-va; BACHURINA, A.M., tekhn.red.

[Handbook for electrical engineers in the lumber industry]
Spravochnik elektromekhanika lespromkhoza. Moskva, Goslesbumizdat,
1958. 320 p. (MIRA 12:4)

1. Nauchnyye rabotniki TSentral'nogo nauchno-issledovatel'skogo
instituta mekhanizatsii i energetiki lesnoy promyshlennosti (for
all except Zhuravlev, Bachurina).
(Electric engineering--Handbooks, manuals, etc.)
(Lumbering--Machinery)

GALYUN, I. A.; KASHEDINA, M. L.; LYSOVA, S. I.; SMIRNOVA, L. D.; ZAKHAROV, A. S.

Teeth, Artificial

Dental prosthesis for children. Stomatologiia

Monthly List of Russian Accession, Library of Congress, October 1952. UNCLASSIFIED

KASHEKHLEBOV, I.E.; LOTSMANOVA, P.N.; NIKONOV, A.A.; OLOVENIKOV, G.B.; PESTOV, G.S.; SINELOBOV, M.A.; TREYNIS, A.M.; TULYAKOV, B.V., inzh.; USTINOVICH, B.P.; ROMANOV, A.V., retsenzent; NIKIFOROV, N.S., red.; SARMATSKAYA, G.I., red.izd-va; GRECHISHCHEVA, V.I., tekhn. red.

[Manual on turpentining] Spravochnik: podsochka lesa. Pod obshchei red. B.V.Tuliakova. Moskva, Goslesbumizdat, 1962. 334 p. (MIRA 16:3)

(Turpentining)

KASHEKOV, L., inzh.

Protecting underground pipelines from corrosion. Sel'. stroi.
9 no.3:14-15 My-Je '54. (MIRA 13:2)
(Pipelines) (Corrosion and anticorrosives)

PODVIDZ, L.G., kand.tekhn.nauk; KIRILLOVSKIY, Yu.L., kand.tekhn.nauk;
KASHEKOV, L.Ya., inzhener.

Theoretical principles of designing jet apparatus for pumping water from deep wells. Nauch. trudy VIESKH 6:5-27 '59. (MIRA 13:12)
(Jet pumps)

KASHEKOV, Lev Yakovlevich; KOBYLYAKOV, L.M., red.; GUREVICH, M.M., tekhn.red.

[Mechanized water supply on livestock farms] Mekhanizatsiia vodosnabzheniia zhivotnovodcheskikh ferm. Moskva, Gos.izd-vo sel'khoz.lit-ry zhurnalov i plakatov. 1961. 319 p. (MIRA 14:7)

(Water supply, Rural)

KASHEKOV, Lev IAkovlevich.

Water-supply of live-stock farms Moskva Moskovskii rabochii, 1954. 63 p.

VOLOD'KO, Ivan Fomich; DOBROVOL'SKIY, N.F.; KASHEKOV, L.Ya.; PASHENKOV, Ya.M.
VOL'FOVSKAYA, V.N., redaktor; DUBROVSKIY, V.A., redaktor; SOKOLOVA,
N.N., tekhnicheskiy redaktor

[Construction of driven wells] Stroitel'stvo trubchatykh kolodtsev.
Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 175 p. (MLRA 9:8)
(Wells))

LAVRENT'YEV, Arkadiy Ivanovich [deceased]; KASHEKOV, Lev Yakovlevich, inzhener; KRYUKOV, V.L., redaktor; PAVLOVA, N.N., tekhnicheskiy redaktor

[Mechanization of the water supply on stock farms] Mekhanizatsii vodosnobzheniia zhivotnovodcheskikh ferm. Izd. 3-e, perer. i dop. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 295 p. (MLRA 9:9)
(Water supply, Rural)

KASHEKOV, L. Ya.

VIDANOV, V.A.; KASHEKOV, L.Ya., inzhener; YAKUSHENKOV, S.M., inzhener;
MATVEYEVA, Ye.M., tekhnicheskiy redaktor

[BN-3 drilling and pumping unit developed by V.A.Vidanov] Buril'no-nasosnaia ustanovka BN-3 sistemy V.A.Vidanova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957. 21 p. (MIRA 10:7)

1. Vsesoyuznyy institut mekhanizatsii (for Kashekov, Yakushenkov)
(Boring machinery) (Pumping Machinery)

[illegible]

BORISOV, Arkhip Markovich; VOLOD'KO, I.F.; KASHEKOV, L.Ya.; SMELYANSKIY, V.A., red.; GUREVICH, M.M., tekhn.red.

[The construction of well shafts] Stroitel'stvo shakhtnykh kolodtsev. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1957. 141 p. (MIRA 11:1)

(Wells)

BREMER, G.I., doktor tekhn.nauk, prof.; GALDIN, M.V., inzh.; DEMIN, A.V., kand.tekhn.nauk; ZYABLOV, V.A., kand.tekhn.nauk; KAPLUNOV, M.M., inzh.; KASHEKOV, L.Ye., inzh.; KOROLEV, V.F., kand.tekhn.nauk; KRASNOV, V.S.; KULIK, M.Ye., kand.tekhn.nauk; MAKAROV, A.P., inzh.; NOVIKOV, G.I., kand.tekhn.nauk; NOSKOV, B.G., inzh.; OLENEV, V.A., kand.vet.nauk; OSTANKOV, V.P., inzh.; PERCHIKHIN, A.V., inzh.; POKHVALENSKIY, V.P., kand.tekhn.nauk; SERAFIMOVICH, L.P., kand. tekhn.nauk; SMIRNOV, V.I., kand.tekhn.nauk; URVACHEV, P.N., kand. tekhn.nauk; FADEYEV, N.N., inzh.; FATEYEV, Ye.M.; KRYUKOV, V.L.; red.; VESKOVA, Ye.I., tekhn.red.

[Reference book on the mechanization of stock farming] Spravochnaia kniga po mekhanizatsii zhivotnovodstva. Moskva, Gos.izd-vo sel'khoz. lit-ry, 1957. 678 p. (MIRA 10:12)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Krasnov, Fateyev).
(Farm equipment) (Stock and stockbreeding)

KASHEKOV, Lev Yakovlevich

[VN-2-8" pumping apparatus; its construction, assembling, and maintenance] Vodostruinaia ustanovka VN-2-8" (ustroistvo, montazh, ukhod). Moskva, 1958. 11 p. (MIRA 11:11)
(Pumping machinery)

KASHEKOV, L. Ya.

AUTHOR: Kashekov, L.Ya., Engineer 99-58-2-4/9

TITLE: "VN-2-8" Water-jet Unit (Vodostruynaya ustanovka "VN-2-8")

PERIODICAL: Gidrotekhnika i Melioratsiya, 1958, 10 # 2, pp 30-36 (USSR)

ABSTRACT: The author describes in detail the construction and operation of the "VN-2-8" water-jet unit used for extracting water from bore holes.
There is 1 table and 5 figures.

AVAILABLE: Library of Congress

Card 1/1

PERCHIKHIN, Abram Vladimirovich, inzh.; KRASNOV, V.S.; KASHEKOV, L.Ye., inzh.; NOVIKOV, G.I., kand.tekhn.nauk; MAKAROV, A.P., inzh.; GALDIN, M.V., inzh.; KOROLEV, V.F., kand.tekhn.nauk; FATEYEV, Ye.M., doktor tekhn.nauk; FADEYEV, N.N., inzh.; ROZIN, M.A., red.; GUREVICH, M.M., tekhn.red.

[Mechanization of heavy work on livestock farms] Mekhanizatsiia trudoemkikh rabot na zhivotnovodcheskikh fermakh. Izd.4., ispr. i dop. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 447 p.
(MIRA 13:10)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Krasnov).
(Stock and stockbreeding) (Farm mechanization)

KRASNOV, V.S.; KASHEKOV, L.Ya., kand. tekhn. nauk; NOVIKOV, G.I., kand. tekhn. nauk; MAKAROV, A.P., kand. tekhn. nauk; GALDIN, M.V., inzh.; KOROLEV, V.F., kand. tekhn. nauk; PERCHIKHIN, A.V., inzh.; FADEYEV, N.N., inzh.; ROZIN, M.A., red.; DEYEVA, V.M., tekhn. red.

[Mechanization of production processes on livestock farms] Mekhanizatsiia proizvodstvennykh protsessov na zhivotnovodcheskikh fermakh. Izd.5., ispr. i dop. Moskva, Sel'khozizdat, 1963. 478 p. (MIRA 17:2)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I. Lenina (for Krasnov).

1. KASHEL', Anatoliy A.; VSEVOLODOV, M.

2. USSR (600)

4. Television

7. Sov. sviaz., 3, No. 5, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

KASHEL', A.

Conference of the 11th Research Commission of the International Radio Consultative Committee. Tekh.kino i telev. 4 no.5:94-95 My '60. (MIRA 13:8)

(Radio--Congresses)

FEDORENKO, P.I., gornyy inzh.; DROBNITSA, V.F., gornyy inzh.; DREBNITSA, A.V., gornyy inzh.; VEKSEL'MAN, V.M.; KASHEL', N.Ya.

Using short-delay blasting to crush rocks in the Dzerzhinskiy and Kirov Mines. Vzryv. delo no.53/10:207- 214 '63. (MIRA 16:8)

1. Krivorozhskiy filial Instituta gornogo dela AN UkrSSR (for Fedorenko, Drobnitsa, Drebnitsa). 2. Rudnik im. Kirova (for Veksel'man). 3. Rudnik im. Dzerzhinskogo (for Kashel').
(Krivoy Rog Basin—Blasting)

KASHEL', N.Ya., gornyy inzh.; FEDORENKO, P.I., gornyy inzh.; KUZ'MICH, S.N., gornyy inzh.

Results of industrial testing of charges with air spaces in the "Dzershinsk" Mine. Vzryv. delo no.54/11:379-383 '64. (MIRA 17:9)

1. Rudnik imeni Dzerzhinskogo (for Kashel'). 2. Krivorozhskiy gornorudnyy institut (for Fedorenko, Kuz'mich).

KASHELINA, I.A.

Change-over to a seven-hours day. Masl.-zhir. prom. 24 no.9:43-44
'58. (MIRA 11:10)

1. Krasnodarskiy maslozhirovoy kombinat.
(Krasnodar--Oil industries)

KASHELINA, I.A., inzh.

Work practices of the section for economic analysis. Masl.-zhir.prom. 28 no.9:38-39 S '62. (MIRA 15:9)

1. Krasnodarskiy maslozhirovoy kombinat imeni V.V.Kuybysheva.
(Krasnodar--Oil industries)

KASHENKO, L.I.

The fescue grass Festuca amblyodes V.Krecz. et Bobr. in Kirghizia.
Trudy Inst. bot. i rast. KirFAN SSSR no.1:27 '54. (MLRA 10:1)
(Kirghizistan--Fescue grass)

KASHENOVA, A.G.

Morphology of the ferroselite. Zap.Vses.min.ob-va 88 no.4:454-456 '59.
(MIRA 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut (VSEGEI), Leningrad; . deystvitel'nyy chlen Vsesoyuznogo mineralogicheskogo obshchestva.
(Ferroselite)

BUR'YANOVA, Ye.Z.; KASHENOVA, A.G.

Selenium content of sedimentary rocks of the Lower Carboniferous of the southern and northern Minusinsk Depressions. Geol.i geofiz. no.5:14-20 '62. (MIRA 15:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut, Leningrad.

(Minusinsk Basin—Selenium)

KASHEPAVA, M. Ya. Cand. Tech. Sci.

Dissertation: "Cutting Gears of a Watch Profile by the Method of Generating on Gear-Milling Machines." Moscow Order of the Labor Red Banner Higher Technical School imeni N. E. Bauman, 26 May 47.

SO: Vechernyaya Moskva, May, 1947 (Project #17836)

KASHEPAVA, M. Ya., YAKHIN, A. B., MALOV, A. N., and MATALIN, A. A.

"Technology of Precision Instrument Construction," Oborongiz, 1949

Translated TABCON, 1 Sep 50 - W-13137

GOLINKEVICH, T.A., kandidat tekhnicheskikh nauk, dotsent;
DORONIN, I.L.; KASHEPOVA, M.Ya., redaktor; ZUDAKIN, I.M., tekhnicheskiy redaktor

[Principles of designing instruments and processes involved in their manufacture] Osnovy proektirovaniia konstruktsii i tekhnologicheskikh protsessov v priborostroenii. Pod obshchei red. T.A.Golinkevicha. Moskva, Gos. izd-vo oboronnoi promyshl., 1954. 274 p. (MLRA 7:10)
(Instruments)

YAKHIN, Abram Borisovich; YEFIMOV, Vladimir Petrovich; SOBOLEV, N.P., professor; retsenzenty; TARASOV, S.V., laureat Stalinskoy premii kandidat tekhnicheskikh nauk, retsenzent; KASHEPAVA, M.Ya., kandidat tekhnicheskikh nauk, nauchnyy redaktor; LOSEVA, G.F., izdatel'skiy redaktor; ZUDAKIN, I.M., tekhnicheskiy redaktor

[Technology of instrument construction] Tekhnologiia priborostroeniia. Moskva, Gos. izd-vo obor. promyshl., 1955. 379 p. (MLRA 9:8)

(Instrument industry)

25(5) PHASE I BOOK EXPLOITATION SOV/1352

Kashepava, M. Ya., Ye. I. Terekhina, V.A. Kudinov, A.S. Lapidus, and G.M. Azarevich

Modernizatsiya universal'nykh gorizontal'no-rastochnykh stankov; rukovodyashchiye materialy (Modernization of Universal Horizontal Boring Machines; Instructions) Moscow, Mashgiz, 1958. 247 p. 7,000 copies printed.

Sponsoring Agency: Moscow. Eksperimental'nyy nauchno-issledovatel'skiy institut metallorezhushchikh stankov.

Ed.: A. Ye. Prokopovich; Ed. of Publishing House: Ye. A. Shemshurina; Tech. Ed.: V.D. El'kind; Managing Ed. for Literature on Metalworking and Toolmaking (Mashgiz): R.D. Beyzel'man, Engineer.

PURPOSE: This book is intended for mechanics and designers

Card 1/10

engaged in modernization of metal-cutting machine tools.

COVERAGE: The book briefly describes both modern universal horizontal boring machines and those of obsolete design which predominate in existing Soviet machine tool stocks. It analyzes the utilization of these machine tools in order to formulate basic modernization requirements. The book also presents ENIMS recommendations and specific design solutions for increasing the speeds, power, feeds, precision, rigidity, vibration stability, and durability of existing horizontal boring machines. Emphasis is placed on reducing support time by increasing the level of mechanization and facilitating the task of the machine tool operator. No personalities are mentioned. There are 62 references, of which 54 are Soviet, 4 German and 4 English.

TABLE OF CONTENTS:

Introduction 3

~~Card 2/10~~

KASHEPAVA, Moisey Yakovlevich; ACHERKAN, N.S., prof., doktor tekhn. nauk, retsenzent; KUNIN, P.A., inzh., red.; CHERNOVA, Z.I., tekhn. red.

[Modern jig boring machines] Sovremennye koordinatno-rastochnye stanki. Moskva, Mashgiz, 1961. 279 p. (MIRA 14:10)
(Drilling and boring machinery)

AYZENSHTADT, L.A.; PEN'KOV, P.M.; GLADKOV, B.A.; LIKHT, L.O.;
KRIMMER, T.Ye.; KASHEPAV, M.Ya., kand. tekhn. nauk;
MERPERT, M.P., kand. tekhn. nauk; KOPERBAKH, B.L.;
CHERNIKOV, S.S., kand. tekhn.nauk; BELOV, V.S.; ZHURIN,
B.F.; MONAKHOV, G.A., kand.tekhn.nauk; MOROZOV, I.I.;
MUSHTAYEV, A.F.; OGNEV, N.N.; PALEY, M.B., kand. tekhn.
nauk; FURMAN, D.B.; LIVSHITS, A.L., kand.tekhn.nauk;MECHETNER,
B.Kh.;SOSENKO,A.B;AVDULOV, A.N.; LEVIN, A.A., kand.tekhn.
nauk; YAKOBSON, M.O., doktor tekhn.nauk; MAYOROVA, E.A.,
kand.tekhn.nauk; MOROZOVA, Ye.M.; ZUSMAN, V.G., kand.tekhn.
nauk; NAYDIS, V.A., kand.tekhn.nauk; VLADZIYEVSKIY, A.P., prof.,
doktor tekhn. nauk, red.; BELOGUR-YASNOVSKAYA, R.I., red.;
CHIGAREVA, E.I., red.; ASVAL'DOV, M.Ya., red.; KOGAN, F.L.,
tekhn. red.

[Machine-tool industry in capitalist countries] Stankostroenie v kapitalisticheskikh stranakh. Pod red. i s predisl. A.P.Vladzievskogo. Moskva, 1962. 822 p. (MIRA 15:7)

1. Moscow. TSentral'nyy institut nauchno-tekhnicheskoy informatsii mashinostroyeniya. 2. Eksperimental'nyy nauchno-issledovatel'skiy institut metallorezhushchikh stankov (for Vladziyevskiy, Belogur-Yasnovskaya, Chigareva, Asval'dov, Kogan).

(Machine-tool industry)

KASHERININOV, G.O.; LEVINSKIY, M.I.; STANKEVICH, V.A.; KOVTUN, T.D.;
BELYAYEVA, I.I.; POPOV, Ye.I.; SMIRNOV, N.S.; SHAKHTAKHTINSKIY,
M.G.; KULIYEV, A.A.

Brief reports. Zav.lab. no.11:1403-1404 '59. (MIRA 13:4)

1. Institut Gipronikel' (for Kasherininov). 2. Institut goryuchikh iskopayemykh (for Belyayeva, Popov Smirnov). 3. Institut fiziki i matematiki Akademii nauk Azerbaydzhanskoy SSR (for Shakhtakhtinskiy, Kuliyev).
(Chemical apparatus)

KASHERININOV, G.O.

Behavior of iron in ammonia solutions during the leaching of cobalt from ores. Zhur. prikl. khim. 33 no.6:1233-1239 Je '60.
(MIRA 13:8)

(Iron) (Cobalt)

S/136/61/000/005/001/008
E021/E106

AUTHOR: Kasherininov, G.O.

TITLE: Hydrometallurgical process of treating enriched ferronickel

PERIODICAL: Tsvetnyye metally, 1961, No.5, pp. 25-29

TEXT: An investigation into the separate extraction of the useful components of ferronickel has been carried out. The possibility of using electrolysis was investigated, and it is shown that in sulphate-chloride baths of normal composition the tendency for nickel to passivate is very much reduced when iron is present in the anode. The presence of iron makes the potential of the nickel anode more negative. Fig.1 shows the relation between the nickel anode potential, V , and the iron content (wt.%). D_A: 1 - 0; 2 - 100 A/m^2; 3 - 200 A/m^2; 4 - 300 A/m^2. Experiments were carried out on the production bath of the "Yuzhuralnikel'" combine, using artificially-prepared alloys containing 15 and 46% iron. In both cases the cobalt:nickel ratio was 1:10. These showed that with current densities up to 250 A/m^2 the dissolution of the anode occurred normally with no passivation.

Card 1/ 3

S/136/61/000/005/001/008
Hydrometallurgical process of E021/E106

The consumption of electrolyte for normal working was 70-100 mℓ/Ah. The iron content in the cathode nickel was less than 0.1%. The concentration of iron in the solution leaving the bath could reach 5-7 g/ℓ and cobalt 1 g/ℓ. Thus the method of electrolysis could be used for treating ferronickel with a nickel:iron ratio of 1:1. The method of purification of the electrolyte normally used in the electrolytic refining of nickel could not be used in this case. Some method of removing large quantities of iron was required. The method used (Author's certificate No. 116887, 1958) was an autoclave process based on the ability of oxygen at high pressures (5-8 atm.) to oxidise bivalent iron even in acid solutions. An essential part of the process is the precipitation of Fe_2O_3. When the reaction was carried out above 130 °C the precipitate was not hydrated. The sulphur content in the precipitate was less than 0.5%. The consumption of electricity was 2300-2400 kWh for one ton of nickel. This gave an iron oxide output of 1.7-1.8 tons and a cobalt output of 95-98 kg.
Acknowledgements are expressed to V.V. Boboshkin and I.L. Nedoshivina for their participation in the work.
There are 3 figures.
Card 2/3

S/080/61/034/008/001/018
D204/D305

AUTHOR: Kasherininov, G.O.

TITLE: Adsorption of cobalt from ammoniacal solutions

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 8, 1961, 1662-1667

TEXT: When extracting pre-reduced cobalt from ores with the use of ammoniacal solutions, it has been found that although metallic cobalt forms complexes with ammonia giving solutions with high metal concentration the concentration of metal in the ore containing the solution has never exceeded more than a few tenths of a gram per liter. Numerous attempts to concentrate the solutions invariably caused the extraction of cobalt and accompanying nickel to fall. It was further shown that the extraction of cobalt reduced steadily as the concentration of the solution was increased, finally attaining negative values. This phenomenon indicates an interaction of the dissolved cobalt with the solid phase end which is capable of adsorbing the metal from the solutions. It was,

Card 1/5

Adsorption of cobalt... S/080/61/034/008/001/018
D204/D305

therefore, necessary to investigate whether adsorption occurs and which ore components act as adsorbers. If the ore is able to adsorb cobalt then the relation between the quantity of the adsorbed metal and its concentration in the final solution may be represented by the isotherm $a = a_0 \frac{C}{B + C}$ where C is Co concentration in mmols/l and the quantity of adsorbed metal is taken per gram of the adsorbent, i.e. reduced ore. Further investigations involved examinations of the adsorption capacity of the main components of the cobalt ores, i.e. quartz, magnetite, iron hydroxides and cobalt rich manganese minerals of asbolan group. Prior to extraction, the minerals were roasted in a reducing atmosphere at 750°C and then treated with ammonium carbonate solution containing 3.12 g/l of Co. The solid obtained was washed and the filtrate examined for Co. Both quartz and magnetite showed no reaction with Co while iron hydroxide retained a considerable quantity of Co. The latter, however, was easily recovered by washing with ammonia solution. The behavior of manganese minerals, which in all cases gave very low and even negative extractions, proved to be of considerable interest. Here the

Card 2/5

Adsorption of cobalt...

S/080/61/034/008/001/018
D204/D305

cobalt, adsorbed by the solid phase, could not be removed either with water or with pure ammonia. If the cobalt-containing manganese minerals originated from the coagulation of manganese with cobalt in colloidal solutions, then a similar process of chemisorption may be assumed to take place during ammoniacal extractions. Pre-reduced Co and Mn first go into solution as complex carbonates in the lower state of oxidation. Subsequent oxidation produces stable Co - NH_3 complex while Mn is hydrolyzed with the formation of colloidal dioxide. On coagulation the dioxide adsorbs Co and forms a residue whose composition is determined by the concentration of Co in the solution. If such residue is again reduced and extracted, then Co may be separated only in the case when its concentration in the equilibrium solution is lower than that at which it has been originally adsorbed. From the practical point of view, it is interesting to examine the kinetics of adsorption during the ammoniacal extractions. Fig. 4 represents the variations of Co and Ni concentrations during 30 hour extraction of the pre-reduced ore containing 0.24% Co and 0.65% Ni with a solution of 1N $(NH_4)_2CO_3$ in 3N NH_4OH in a turbo-aerator where the solid to liquid ratio is 1 : 3. The curves

Card 3/5

Adsorption of cobalt... S/080/61/034/008/001/018
D204/D305

show that the solubility of Co is high and up to 90% of the extracted metal goes into solution within the first hour of extraction. Later the solubility drops and reaches negative values. Nickel on the other hand dissolves at a moderate rate and no decrease in its concentration has been observed. The decrease of Co concentration in the solution indicates that its rate of reaction with the products of hydrolysis is low and to achieve equilibrium a predetermined time interval is needed. By reducing the time of contact between the enriched solution and the solid phase, losses due to adsorption should, thus, also be reduced. The cobalt which remains in the metallic form can be dissolved by repeated treatment of the residue while the metal adsorbed during prolonged extraction is strongly bound with manganese and cannot be extracted. It is advantageous also to reduce the relative solid phase content during the extraction since both concentration of the solution and quantity of adsorbent are then also reduced. If the equilibrium between the solution and residue is set at a lower rate than the rate of solubility of cobalt extraction is increased and the time of contact between solid and solution is decreased. There are 4 figures, 3 tables and 4 refer-

Card 4/5

Adsorption of cobalt... S/080/61/034/008/001/018
D204/D305

ences: 3 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: M.H. Caron, J. of Metals, 188, 1 (1950).

SUBMITTED: July 22, 1960

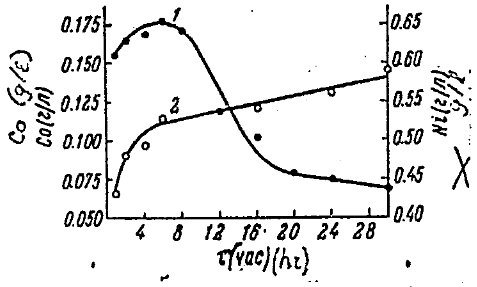


Fig. 4

Card 5/5

KASHERININOV, G.O.

Adsorption of cobalt from ammonia solutions. Zhur.prikl.
khim. 34 no.8:1662-1667 Ag '61. (MIRA 14:8)
(Cobalt) (Ammonia)

KUZNETSOV, S. M., KASHERININOV, R. M.

Development of production techniques of motion-picture equipment at the "Lenkinap" Factory. Tekh.kino i telev. 4 no.5:56-61 My '60. (MIRA 13:8)
(Leningrad--Motion pictures--Equipment and supplies)

KASHEUTOVA, M. S.

"On the Identification of Local Strains of Dysentery Microorganisms," a report given at an interoblast sicentific-practical conference on problems of laboratory diagnosis of infectious diseases which was held at the Tomsk Scientific Research Institute of Vaccines and Sera, 12-16 March 1956.

SUM: 1360 p. 238

KASHEV, A.A.; VASIL'YEV, Ye.K.

Elementary cell and space group of alvanite. Vest. AN Kazakh. SSR
19 no.7:93 Jl '63. (MIRA 17:2)

38127. KASHEVAROV, B.

Novyye formy dokumentatsii. (Kontrol' ucheta Moloka). Moloch. prom-st', 1949, No 12, s. 21-22

KASHEVAROV, E.N., inzh.

Applying the theory of random functions in analyzing some experimental curves. Mekh. i elek. sots. sel'khoz. 16 no.6:14-17 '58. (MIRA 12:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii sel'skogo khozyaystva.
(Functional analysis)

KASHEVAROV, E.N., inzh.

Apparatus for testing agricultural machinery at the International Traveling Exhibition of Apparatus. Mekh. i elek.sots.sel'khoz. 17 no.3:52-53 '59. (MIRA 12:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii sel'skogo khozyaystva.

(Agricultural machinery--Testing)

KASHEVAROV, Ye.M., inzh.

Intensification of production in Pechora Basin coal mines.
Ugol' 40 no.1:66-67 Ja '65. (MIRA 18:4)

L 19067-63 EWT(1)/BDS AFFTC TF

ACCESSION NR: AP3004215 S/0018/63/000/007/0085/0087

AUTHOR: Kashevarov, Yu. (Colonel-Engineer, Candidate, Technical Science)

TITLE: Determination of the azimuth in a short time

XB

SOURCE: Voyenny*y vestnik, no. 7, 1963, 85-87

TOPIC TAGS: azimuth, resection point, damping coefficient

ABSTRACT: The method developed by the author reduces the time for determining the direction of the true meridian with 2, 3, and 4 resection points. N_0 is calculated with 2 or 3 resection points only when it is necessary to carry out survey operations in a very short time, even at the expense of accuracy. If there is time, it is expedient to orient the gyrocompass with 4 or even 6 resection points. Two-point resection is used when the damping coefficient of the fluctuations of the sensitive element of the gyrocompass is known. If it is not known, N_0 is found by three-point resection. N_0 is calculated with three-point resection from Formula (1) of Enclosure 1 in which the last term

L 19067-63

ACCESSION NR: AP3004215

is the correction for the damping of the sensitive element of the gyrocompass. The numerator of the term is in minutes and the denominator in degrees. For two-point resection, N_0 is found from Formula (2) of Enclosure, 1. Coefficient K is calculated from Formula (3) of Enclosure, 1 in which N_i is the reading at the observation of the i-point of resection. The numerator is expressed in seconds (minutes) and the denominator- in minutes (degrees). To find the damping coefficient, the author recommends the observation of no less than six resection points from which it is possible to calculate no less than four particular values of this coefficient. The author's method eliminates the defects of the method developed by Col. N. Stroinov (Voyennyy vestnik No. 9, 1962) based upon the use of a gyroscope and the observation not of four, but two resection points. Orig. art. has: 3 formulas and 4 tables.

ASSOCIATION: Soviet Army

SUBMITTED: 00	DATE ACQ: 07Aug63	ENCL: 01
SUB CODE: CG	NO REF SOV: 000	OTHER: 000

Card 2/3

KASHEVAROV, Yu., inzhener-podpolkovnik, kand.tekhn.nauk

Determining an azimuth in shortened periods of time. Voen.vest. 43 no.7:85-87 Jl '63. (MIRA 16:11)

KASHEVAROV, Yu.B.; SOKOLOV, I.A., polkovnik, red.; MYASNIKOVA, T.F., tekhn. red.

[Celestial orientation for artillery] Astronomicheskoe orientirovanie v artillerii. Moskva, Voen. izd-vo M-va oborony SSSR, 1961. 114 p. (MIRA 14:10)

(Range finding)

TABLE OF CONTENTS [abridged]:

[illegible]

[illegible] course indicator and its [illegible]

Gyrocompass and its use for "locking on" — 51

29016
S/020/61/140/004/017/023
B106/B110

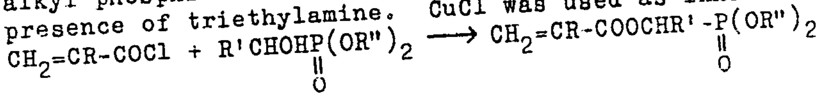
15.8150

AUTHORS: Pudovik, A. N., Kashevarova, E. I., and Rudnev, Yu. P.

TITLE: Phosphorus-containing acrylic and methacrylic esters

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 140, no. 4, 1961, 841-843

TEXT: Polymers and copolymers of acrylic and methacrylic esters containing sulfur, fluorine, tin, lead, silicon, mercury, etc. often have particular properties: high hardness and heat resistance, good adhesion to glass and metal, low permeability to X-rays, low combustibility, etc. In this connection, a method was developed for the synthesis of acrylic and methacrylic esters containing phosphorus in the alcohol component. Some properties of these esters were studied. The synthesis is based on the reaction of acid chlorides of acrylic and methacrylic acids with hydroxyalkyl phosphinic esters (molar ratio 1 : 1) in ether solution in the presence of triethylamine. CuCl was used as inhibitor.



$$CH_2{=}CR{-}COCl + R'CHOH\underset{\overset{\|}{O}}{P}(OR'')_2 \longrightarrow CH_2{=}CR{-}COOCHR'{-}\underset{\overset{\|}{O}}{P}(OR'')_2$$

X

Card 1/3

solutions in benzene

29016

Phosphorus-containing acrylic ...

S/020/61/140/004/017/023
B106/B110

and acetone. Methyl methacrylate and α-(dimethyl phosphono)-ethyl methacrylic ester (weight ratio 83 : 17) were copolymerized at 75°C for 1.5 hr. The copolymer obtained is a transparent and solid product soluble in acetone and benzene. A white, solid, nontransparent product containing 2.2% phosphorus was obtained after reprecipitating by dissolution in acetone precipitating with petroleum ether, and subsequent drying in vacuo. This copolymer burns with sooty flame and keeps burning when the flame has been removed. There are 1 table and 16 references: 11 Soviet and 5 non-Soviet. The three most recent references to English-language publications read as follows: G. Sumrell, I. Briskin, G. Ham, C. S. Shramm, J. Am. Chem. Soc., 81, 4308 (1959); C. S. Marvell, W. S. Anderson, Ind. and Eng. Chem., 47, 344 (1955); A. Saiton, E. Rochow, J. Org. Chem., 23, 116 (1958).

ASSOCIATION: Kazanskiy gosudarstvennyy universitet im. V. I. Ul'yanova-Lenina (Kazan' State University imeni V. I. Ul'yanov-Lenin)

PRESENTED: May 8, 1961, by B. A. Arbuzov, Academician

SUBMITTED: May 5, 1961

Card 3/~~6~~3

PUDOVIK, A.N.; KASHEVAROVA, E.I.; KHUSAINOVA, N.G.

Phosphorus-containing amides of acrylic and methacrylic acids.
Dokl.AN SSSR 145 no.4:818-821 Ag '62. (MIRA 15:7)

1. Kazanskiy gosudarstvennyy universitet im. V.I.Ul'yanova-Lenina.
Predstavleno akademikom B.A.Arbuzovym.
(Acrylamide) (Methacrylamide) (Phosphorus organic compounds)

PUDOVIK, A.N.; KHUSAINOVA, N.G.; KASHEVAROVA, E.I.

Polymerization and copolymerization of phosphorus-containing esters of methacrylic acid. Vysokom.soed. 5 no.9:1376-1381 S '63. (MIRA 17:1)

1. Kazanskiy gosudarstvennyy universitet imeni V.I.Ul'yanova-Lenina.

[illegible]

TOPIC TAGS: ester, phosphinic acid, phosphoric acid, anhydride, organic synthetic

[illegible] anhydrides of acrylic [illegible] esters

[illegible]

[illegible] undergo thermal rearrangement [illegible]

[illegible] alkylphos[illegible]

[illegible]: Kazanskiy gosudarstvennyy universitet (Kazan State University)

SUBMITTED: 27Mar63 ENCL: 00 SUB CODE: OC, GC

[illegible] OTHER: [illegible]

[illegible] A. M. Kashev[illegible]

[illegible] benzeneselenol

[illegible]

ACCESSION NR: AP4045101 9

[illegible] the reaction of [illegible] selenoate

[illegible] and 74-75C) in [illegible]

Se

$(C H O) PCl + KOOC - CR = CH \rightarrow (C H [illegible]) COO - CR = CH_2$ [illegible]

[illegible] eneglycol [illegible]

[illegible] prepared by reaction of [illegible]phosphoric acid chlodires with ethylene glycol esters of acrylic and methacrylic acids in ether solution in the presence of triethylamine. Dialky(methacroylethyleneglycol) phosphites were prepared by reaction of dialkylphosphorous acid chlorides with the ethyleneglycol ester of methacrylic acid. The presence of trivalent phosphorus in the raction product was confirmed by infrared lenoglycol ester of methacrylic acid. The presence of trivalent phosphorus in the raction product was confirmed by infrared spectra and through the addition of sulfur to give diethyl(methacroylethylenegl [illegible] duced the [illegible]

ACCESSION NR: AP5009935

...tion product. Diisopropyl, dipropyl, and dibutyl chlorophos-

Orig. art. has 1 table.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet (Kazan State University)

[illegible]

PUDOVIK, A.N.; KASHEVAROVA, E.I.; GOLOVEN'KINA, L.I.

Polymerization and copolymerization of β-methacryloxyethyldialkyl phosphates, β-methacryloxyethyldialkyl phosphites and mixed methacrylic and dialkylphosphorous acid anhydrides. Vysokom.soed. 7 no.7:1248-1253 Jl '65. (MIRA 18:8)

1. Kazanskiy gosudarstvennyy universitet imeni Ul'yanova-Lenina.

KASHEVAROVA, N.P.

Ostracoda of the continental facies of the Kazan stage on the eastern slope of the middle Timan and Kanin Peninsula. Trudy VNIGRI no.179:487-515 '61. (MIRA 16:7)

(Timan Ridge--Ostracoda, Fossil)
(Kanin Peninsula--Ostracoda, Fossil)

KASHEVAROVA, N.P.

New Ostracoda species from upper Permian (Ufa and Tartarian stages) deposits of the Southern Timan and the Volga-Ural region. Trudy VNIGRI no.115:301-347 '58. (MIRA 11:10)

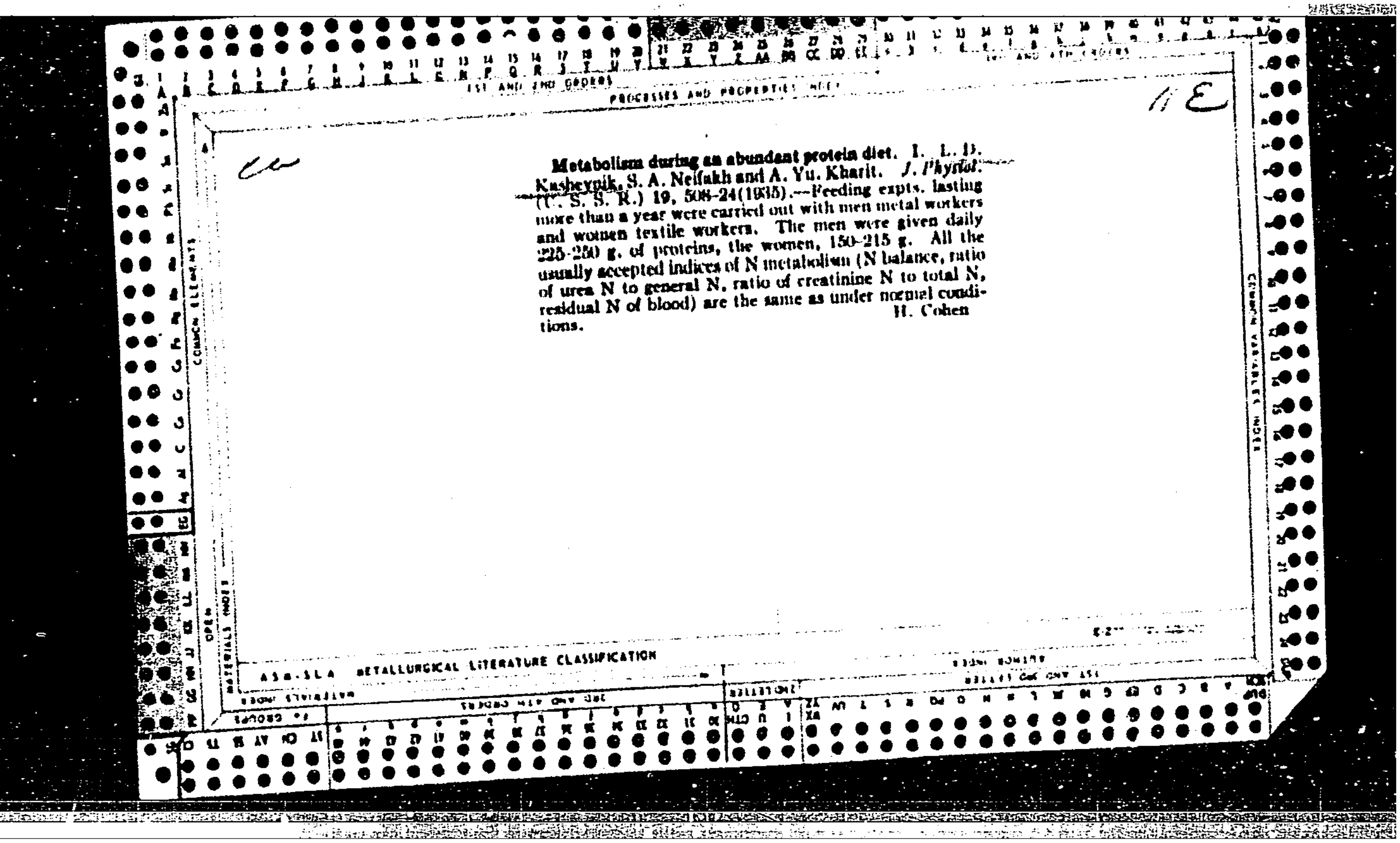
(Timan region--Ostracoda, Fossil)
(Volga Valley--Ostracoda, Fossil)
(Ural Mountain region--Ostracoda, Fossil)

KASHEVAROVA, N.P.

Stratigraphy of upper Permian sediments in the southern Timan Ridge. Trudy VNIGRI no.133:233-271 '59. (MIRA 13:1)
(Timan Ridge--Geology, Stratigraphic)

KASHEVAROVA, Yu.A.; VANYUSHKINA, V.I.

Rapid method for quantitative determining of hydroquinone in polyester acrylates. Lakokras. mat. i ikh prim. no.5:47 '63. (MIRA 16:11)


1ST AND 2ND ORDERS
PROCESSES AND PROPERTIES INDEX
COMMON ELEMENTS
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION
11 E
Ca

Metabolism during an abundant protein diet. I. L. D. Kashevnik, S. A. Neifakh and A. Yu. Kharit. *J. Physiol. (U. S. S. R.)* 19, 508-24(1935).—Feeding expts. lasting more than a year were carried out with men metal workers and women textile workers. The men were given daily 225-250 g. of proteins, the women, 150-215 g. All the usually accepted indices of N metabolism (N balance, ratio of urea N to general N, ratio of creatinine N to total N, residual N of blood) are the same as under normal conditions.

H. Cohen

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

CA

11 C

The biochemistry of vitamin C. III. The capacity of the Japanese tea fungus to synthesize vitamin C. L. D. Kashevnik. *Bull. biol. méd. exptl. U. R. S. S.* 3, 81-2 (1937) (in English).—Cultures of the Japanese tea fungus grown on sugar soln. synthesize a reducing substance closely related to vitamin C. Preliminary culture of the fungus on yeast ext. before transfer to sugar soln. or to tea ext. causes an increase in reducing substances over that obtained when the fungus is grown on tea ext. alone.

S. A. Karjala

COMMON ELEMENTS

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

ea

11E

The glutathione content of the blood and certain organs in experimental scurvy. L. D. Kashevnik, S. A. Eidman and I. B. Fridlyand. ~~Voprosy Pitaniya~~ 8, No. 4, 41-9 (1939).—Experimental scurvy in guinea pigs results in a decrease from 40 to 33 mg. % in reduced glutathione (I) and an increase from 5 to 11 mg. % in oxidized I in the blood. There is an increase in reduced I in the liver and kidneys, with occasional slight increases in oxidized I. There is a decrease in both reduced and oxidized I in the adrenals. S. A. Karjala

COMMON ELEMENTS

MATERIALS INDEX

OPEN

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

CA

118

Biochemistry of ascorbic acid. III. Effect of ascorbic acid on catalase activity. L. D. Kashevnik and G. S. Konikova (Natl. Med. and Stomatological Inst., Smolensk). *Byull. Ekspll. Biol. Med.* 13, No. 1-2, 66-7(1942); cf. C.A. 34, 5181⁴.—The effect of ascorbic acid on catalase activity in prepns. of blood of rabbits and rats and livers of sheep, swine, and cattle was detd. by the amt. of 1% soln. of H_2O_2 (in ml. of 0.1 N $KMnO_4$) reduced in the system catalase + H_2O + H_2O_2 at room temp., with addn. of ascorbic acid in physiol. soln. at a concn. of 10-20 mg. %. Catalase activity was reduced 30 to 90% by the presence of ascorbic acid, and this effect was shown not to be due to pH effect of the ascorbic acid soln.

K. Starr Chester

COMMON ELEMENTS

OPEN

MATERIALS INDEX

COMMON VARIABLES INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

AUTHOR INDEX

1ST AND 3RD LETTER

2ND LETTER

3RD AND 4TH ORDERS

MATERIALS INDEX

FE GROUPS

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

0A

11 E

Biochemistry of ascorbic acid. II. Effect of catalase on stability of ascorbic acid. L. D. Kashevnik and P. R. Girshberg. *Byull. Eksptl.* ~~*Biol. Med.* 14,~~ No. 8, 65-7 (1942); cf. C.A. 40, 5473⁴.—Catalase prepns. (from rabbit blood) tend to stabilize ascorbic acid which is oxidized aerobically at a slower rate than it is in the absence of catalase. The same effect was observed with prepns. from liver of pigs, cows, and rams. G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

KASHEVNIK, L.D.

[Metabolism in cases of vitamin C deficiency] Obmen veshchestv pri avitaminoze C. Tomsk, 1955. 145 p. (MIRA 10:3)
(ASCORBIC ACID)

USSR/General Problems of Pathology - Tumors. Metabolism. U

Abs Jour : Ref Zhur Biol., No 1, 1959, 4186

Author : Kashevnik, L.D., Sal'nik, BlYu., Klinova, N.I.

Inst : Tomsk Medical Institute, Tomsk University.

Title : Data on the Brichemistry of Cancer. Report I. Glycolytic Activity of the Blood in Cancer Disease

Orig Pub : 5-y Pavlovsk. sb. Tomskiy med. in-t, Tomsk. Un-t, 1956, 81-84.

Abstract : Washed erythrocytes were investigated in the Warburg apparatus in patients with cancer of the stomach, along with the glycolytic activity of defibrinated blood and also of thrice-washed erythrocytes to which glucose was added. The glycolytic activity of the blood, as determined by the three methods, significantly higher in the ill than in the healthy subjects. -- Ye.A. Sherstnev

Card 1/1

KASHEVNIK, L.D. (Tomsk, ul. Uchebnaya, d.20, kv. 40); GORBENKO, L.P. (Tomsk, B. Kazanskaya ul., d.61, kv.4)

Electrophoretic determination of changes in blood proteins in cancer. Vop.onk. 5 no.5:560-565 '59. (MIRA 12:12)

1. Iz kafedry biokhimii, kafedry gospital'noy khirurgicheskoy kliniki Meditsinskogo instituta i onkologicheskogo dispansera Tomska (rukovoditel' - prof. L.D. Kashevnik).
(BLOOD PROTEINS, in various dis.
cancer (Rus))
(NEOPLASMS, blood in
proteins (Rus))

ACCESSION NR: AT4017184 S/0000/63/000/000/0499/0507

AUTHOR: Belousov, N.N. (Leningrad); Kashevnik, L.Ya. (Leningrad)

TITLE: Influence of cooling rate during crystallization on the structure of some non-ferrous alloys of the solid solution type

SOURCE: AN BSSR. Fiz.-tekhn. institut. Teplofizika v liteynom proizvodstve (Thermal physics in the foundry industry), Minsk, 499-507

TOPIC TAGS: crystallization, metal crystallization, cooling rate, non-ferrous alloy, solid solution, alloy structure, alloy crystallization

ABSTRACT: In a publication by A.I. Veynik it was noted that there is a spectral heat of crystallization at each stage of hardening of an alloy. The results of the present investigation showed that the cooling rate of solid solution alloys during hardening has a marked influence on the microstructure. Increasing the alloy cooling rate from a temperature much higher than the liquidus to a temperature in the hardening interval alters the ratio of solid and liquid phases at different times of crystallization. (See Fig. 1 of the Enclosure). These results show the possibility of significant variation in crystallization of alloys with a wide temperature interval by regulating the temperature of alloy heating

Card 1/3

ACCESSION NR: AT4017184

prior to pouring, combined with different cooling rates when the cast hardens. Overheating of aluminum-magnesium alloys allows one to obtain dense alloy castings with a fine-grain structure and high mechanical properties. Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: Fiz.-tekhn. institut AN BSSR. (Institute of Physics and Technology, AN BSSR)

SUBMITTED: 19Apr63 DATE ACQ: 06Mar64 ENCL: 01

SUB CODE: MM NO REF SOV: 006 OTHER: 000

ACCESSION NR: AT4017184 ENCLOSURE: 01

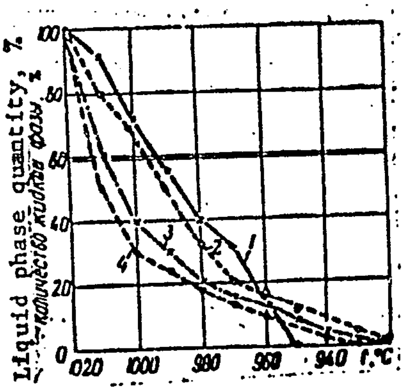


Fig. 1 Variation of the quantity of the liquid phase of M4 alloy for different cooling rates
1 - theoretical curve;
2 - 0.5 deg/min;
3 - 10 deg/min;
4 - 125 deg/min

Card 3/3

33676
S/058/61/000/012/045/083
A058/A101

18.7520

AUTHOR: Kashevnik, L. Ya.

TITLE: Nonequilibrium crystallization of solid solutions

PERIODICAL: Referativnyy zhurnal, Fizika, no. 12, 1961, 353, abstract 12E426 (Nauchno-tekhn. inform. byul. Leningr. politekhn. in-t, 1960, no. 11, 64 - 75)

TEXT: The effect of cooling rate on crystallization was investigated in the Cu-Si and Al-Zn solid-solution systems. As the cooling rate is increased, the solidus line for crystallization is shifted as compared with the equilibrium system to the higher-temperature side, and a change is observed in the rate of crystal growth, as well as in the ratio of amount of liquid to solid phase at different instants of crystallization. Increase of the cooling rate causes the microhardness of the quenched liquid to increase, which is associated with a change in composition. Spectral-analysis data establish the regularity of change in the concentration of solid solution and residual liquid at different instants of crystallization for different cooling rates. It is inferred that the crystallization process in solid solutions under real conditions takes a different course

X

Card 1/2

33676
S/058/61/000/012/045/083
A058/A101

Nonequilibrium crystallization of solid solutions

than is indicated by the equilibrium phase diagram, and therefore when using the phase diagram, the cooling rate under real conditions is a factor to be reckoned with.

A. M.

[Abstracter's note: Complete translation]

Card 2/2

KASHEVNIK, L.Ya.; KASHCHENKO, G.A.

Investigating the crystallization of solid solutions by the method of local spectrum analysis. Izv. vys. ucheb. zav.; tsvet. met. 4 no.5:165-169 '61. (MIRA 14:10)

1. Leningradskiy politekhnicheskiy institut, Kafedra metallografii i termicheskoy obrabotki metallov.

(Nonferrous alloys--Spectra)
(Crystallization)

38574

S/081/62/000/010/011/085
B138/B101

18.7520

AUTHOR: Kashevnik, L. Ya.

TITLE: Disequilibrium crystallization of solid solutions

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1962, 47, abstract 10B298 (Nauchno-tekhn. inform. byul. Leningr. politekhn. in-t, no. 11, 1960, 64 - 75)

TEXT: Using differential thermal analysis combined with quenching in the course of crystallization and microhardness measurements, the effect of the rate of cooling (0.5, 10 and 125°C/min) on the crystallization of solid solutions belonging to the systems Cu-Si (up to 3.19 %.Si) and Al-Zn (up to 18.64 % Zn), was studied. The method of local spectroscopy used in this work, with the spark localized to 30 - 40 mμ, is described. It was found that as the crystallization temperature falls, the experimental concentration (C) of the second component in the supercooled liquid rises above the C-value corresponding to the liquidus line. Throughout almost the entire range of crystallization the concentration of the second component in the solid solution dendrites remains constant and approximately the same as for the initial alloy. Only the sectors which solidified last have in-

X

Card 1/2

creased C. As the rate of cooling rises, so the difference between the experimental and theoretical C in the liquid rises. The nature of the variation in C in the dendrites and liquid is preserved during crystallization. [Abstracter's note: Complete translation.]

X

PHASE I BOOK EXPLOITATION SOV/5800

Smirnov, Vasiliy Sergeyevich, Vasiliy Dmitriyevich Durnev, and Nikolay Petrovich Kashevskiy

Prodol'naya periodicheskaya prokatka (Longitudinal Periodic-Profile Rolling) Moscow, Mashgiz, 1961. 254 p. 6000 copies printed.

Ed. (Title page): V. S. Smirnov, Corresponding Member, Academy of Sciences USSR; Ed.: P. V. Kamnev, Candidate of Technical Sciences; Ed. of Publishing House: G. A. Mitarchuk; Tech. Ed.: L. V. Shchetinina; Managing Ed. for Literature on the Design and Operation of Machines, Leningrad Department, Mashgiz: F. I. Fetisov

PURPOSE: This book is intended for technical personnel, and may also be useful to students at schools of higher technical education specializing in mechanical engineering amd metallurgy .

COVERAGE: Problems of periodic-profile rolling are discussed. Particular attention is given to the rolling of periodic profiles used as blanks in pressworking and in some cases as finished products. Also discussed are theoretical funda-

Card 1/4

mentals of periodic-profile rolling, periodic-profile pass design and process parameters, and rolling equipment. The following advantages of this advanced method for the pressworking of metals are indicated: saving of metal, improvement of product quality, and increased productivity in pressworking and cutting of periodic-profile blanks. The Introduction, Secs. 1,3,4,5, and 6 of Ch. I, and Secs. 13 ans 14 of Ch. III were written by V. S. Smirnov. Chs. IV and V and the remaining Secs. of Ch. III were written by V. D. Durnev. N. P. Kashevskiy wrote Ch. II. Sec. 2 of Ch. I was written by V. S. Smirnov together with V. D. Durnev. No personalities are mentioned. There are 71 references, all Soviet.

TABLE OF CONTENTS:

Introduction 3

Ch. I. Theoretical Fundamentals of Periodic-Profile Rolling 7
   1. Basic concepts and terms 7
   2. Angles of bite 10

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Hard facing of iron mill rolls with a ribbon electrode.
Avtom.svar. 15 no.10:71-77 O '62. (MIRA 15:11)
(Rolls (Iron mills))
(Hard facing)